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PATENTAttorney Reference Number 6395-64908-01  
Application Number 09/826,115S36/29.22  
424/218.1

C07H 21/04

A61K 39/12

ALLOWED CLAIMS  
LISTING OF CLAIMS

1. (Previously presented) An isolated nucleic acid comprising a transcriptional unit encoding an engineered Japanese Encephalitis Virus (JEV) signal sequence, which engineered JEV signal sequence comprises SEQ ID NO:14, and an immunogenic flavivirus antigen of a flavivirus other than JEV, wherein the transcriptional unit directs the synthesis of the immunogenic flavivirus antigen.

## 2. CANCELLED.

2 3. (Previously presented) The nucleic acid of claim 1, wherein the immunogenic flavivirus antigen is of a flavivirus selected from the group consisting of yellow fever virus, dengue serotype 1 virus, dengue serotype 2 virus, dengue serotype 3 virus, dengue serotype 4 virus, Powassan virus and West Nile virus.

3 4. (Previously presented) The nucleic acid of claim 1, wherein the transcriptional unit encodes the engineered JEV signal sequence and an M protein and an E protein of West Nile virus.

4 5. (Previously presented) The nucleic acid of claim 1, wherein the transcriptional unit encodes the engineered JEV signal sequence and an M protein and an E protein of yellow fever virus.

5 6. (Previously presented) The nucleic acid of claim 1, wherein the transcriptional unit encodes the engineered JEV signal sequence and an M protein and an E protein of St. Louis encephalitis virus.

6 7. (Previously presented) The nucleic acid of claim 1, wherein the transcriptional unit encodes the engineered JEV signal sequence and an M protein and an E protein of Powassan virus.

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7 8. (Previously presented) The nucleic acid of claim 1, wherein the immunogenic flavivirus antigen is selected from the group consisting of an M protein of a flavivirus, an E protein of a flavivirus, both an M protein and an E protein of a flavivirus, a portion of an M protein of a flavivirus, a portion of an E protein of a flavivirus and both a portion of an M protein of a flavivirus and a portion of an E protein of a flavivirus or any combination thereof.

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8 9. (Previously presented) The nucleic acid of claim 8, wherein the immunogenic flavivirus antigen is both the M protein and the E protein of a flavivirus.

9 10. (Original) The nucleic acid of claim 1, wherein the nucleic acid is DNA.

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10 11. (Original) The nucleic acid of claim 10, comprising a nucleotide sequence selected from the group consisting of SEQ ID NO:15, SEQ ID NO:19, SEQ ID NO:21 and SEQ ID NO:23.

11 12. (Previously presented) The nucleic acid of claim 1, wherein the transcriptional unit comprises a control sequence disposed appropriately such that it operably controls the synthesis of the immunogenic flavivirus antigen.

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12 13. (Original) The nucleic acid of claim 12, wherein the control sequence is the cytomegalovirus immediate early promoter.

13 14. (Previously presented) The nucleic acid of claim 1, comprising a Kozak consensus sequence located at a translational start site for a polypeptide comprising the immunogenic flavivirus antigen encoded by the transcriptional unit.

14 15. (Original) The nucleic acid of claim 1 wherein the transcriptional unit comprises a poly-A terminator.

15 16. (Currently amended) An isolated cell comprising the nucleic acid of claim 1.

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16 17. (Original) A composition comprising the nucleic acid of claim 1 and a pharmaceutically acceptable carrier.

18 - 27. CANCELLED.

17 28. (Previously presented) The nucleic acid of claim 1, wherein the immunogenic flavivirus antigen is a St. Louis encephalitis virus antigen.

29. CANCELLED.

30. CANCELLED.

31. CANCELLED.

18 32. (Previously presented) The nucleic acid of claim 1, wherein the immunogenic flavivirus antigen is a yellow fever virus antigen.

33. CANCELLED.

19 34. (Previously presented) The nucleic acid of claim 1, wherein the immunogenic flavivirus antigen is a dengue virus antigen.

35. CANCELLED.

20 36. (Previously presented) The nucleic acid of claim 1, wherein the immunogenic flavivirus antigen is a West Nile virus antigen.

37 - 43. CANCELLED.